

IN THE UNITED STATES DISTRICT COURT

FOR THE DISTRICT OF DELAWARE

INTUITIVE SURGICAL, INC.)	
and INTERNATIONAL BUSINESS)	
MACHINES CORPORATION,)	
)	
Plaintiffs,)	
)	
v.)	Civil Action No. 01-203-SLR
)	
COMPUTER MOTION, INC.,)	
)	
Defendant.)	

MEMORANDUM ORDER

At Wilmington this 12th day of July, 2002, having heard oral argument and having reviewed papers submitted in connection therewith;

IT IS ORDERED that the disputed claim language in United States Patent No. 6,201,984, as identified by the above referenced parties, shall be construed as follows, consistent with the tenets of claim construction set forth by the United States Court of Appeals for the Federal Circuit:

1. **"Speech synthesis, "voice synthesis" or "synthesized voice messages."** Electronically creating specific units of sound and combining those units of sound to produce audible words that are output from the robotic surgical system to the surgeon.¹

¹The '984 patent refers to "synthesized voice messages" as one type of "audible" message issued from the robotic surgical system. (Claims 24, 32; col. 16, ln. 55 to col. 17, ln. 3) The patent being otherwise silent on the nature of "synthesis," the court concludes that the plain meaning of the term is instructive, i.e., an "action of putting together" or a

2. **"Voice recognition," "voice recognition system" or "input device."** The surgical robotic system contains an apparatus into which the surgeon speaks verbal instructions. These terms are not limited to the structure of any embodiment described in the specification.²

3. **"A speech synthesis system to provide the surgeon with voice messages containing information about the operation of the system," "a voice synthesis system for providing audible information to a surgeon regarding operation of the system during the surgery" or "a speech synthesis system provides the surgeon with voice messages containing information about the operation of the system."** Requires synthesized speech informing the surgeon

"combination of parts or elements so as to form a whole." (Webster's Third New Int'l Dictionary 2321 (1993)) Because the court finds that the term requires an assembly of fabricated elements of sound, the pre-recorded playback of sound does not constitute "synthesis."

²The court rejects defendant's suggestion that "speech synthesis" is inherent in a "voice recognition system." "Voice recognition" is the mechanism by which spoken instructions are input into the robotic surgical system. (Col. 4, lns. 14-17) "Speech synthesis," on the contrary, is one way in which sound can be output from the robot to the surgeon. (Col. 16, ln. 55 - col. 17, ln.3) This conclusion is supported by the structure of the claims, which consists of the "voice recognition" limitation in independent claims and "synthesis" as an added limitation in corresponding dependent claims. (See, e.g., claims 13, 15) References to a "speech recognition and synthesis system," therefore, denote the input **and** output functions of the robotic surgical system. (col. 6, lns. 23-25, lns. 48-59) Furthermore, the court finds no support in the specification or claims for defendant's assertion that "voice recognition" and "input device" are means-plus-function limitations pursuant to 35 U.S.C. § 112 ¶ 6.

about the state of the system or a change in the state of the system.

4. **"The speech synthesis system provides a message to the surgeon stating information about the movement of the surgical camera."** Requires synthesized speech informing the surgeon about the movement of the surgical camera.

5. **A voice synthesis system for providing audible information "wherein said audible information comprises information indicating undesired movement of the distal end of the surgical instrument."** Requires synthesized speech indicating that the distal end of the surgical instrument has moved in an undesired way.

6. **"Robot," "robotic manipulator" or "robotic arm."** The moving parts of a robotic system made of links and joints, where the joints typically have motors that operate through a drive mechanism to move the joints, and the motors are typically actuated by a computer controller.

7. **"Moving the instrument in response to motor signals."** The surgical instrument of the robotic surgical system is moved by the robot in response to signals received by drive mechanisms or motors/actuators in the robotic arm.

8. **"Generating the motor signals in response to the spoken instructions."** The computer/controller of the robotic surgical

system generates motor signals in response to the surgeon's spoken instructions.

9. **"Verbally command motions."** The voice recognition system of the robotic surgical system permits the surgeon to use his voice to control the movement of the robotic manipulator or the surgical instrument.

10. **"Said input voice command indicating a desired movement."** The voice command input to the system by the surgeon indicates a desired movement of the surgical instrument.

11. **"Controlled degree of freedom."** An independent motion or direction of motion that the robot manipulator is capable of making.

12. **"At least one controlled degree of freedom."** The robotic manipulator has at least one, but may have more than one, controlled degree of freedom. Usually the number of degrees of freedom the robot manipulator has corresponds to the number of independent motorized joints the robot manipulator has.

13. **"Wherein a voice recognition system further permits the surgeon to select commands or operating modes from menus."** The voice recognition system of the robotic surgical system permits the surgeon to select commands or operating modes from displayed menus.

Sue L. Robinson
United States District Judge